

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

Malaysia has a population of 27.17 million people and total of 197,519 disabled people have registered with the Department of Social Welfare Malaysia (DSW) at the end of 2006. This figure is not a true reflection of the number of disabled people as registration is voluntary.

As citizens of this country, the disable people as minority group have a right in education, employment, proper housing, medical care, accessible transportation, a barrier-free environment, sports and recreation and also a right to participate in all aspects of life. Base on Disable Issues for the 9th Malaysia Plan state that government seriously concern to Improvement in the overall quality of life for people with disabilities by alleviating them from deprivation, hardship and poverty. Disable people especially using wheelchair should have the opportunities and improved living conditions resulting from social and economic development.

Statistics provided by the Higher Education Ministry last year show that there were 183 registered disabled students studying at public higher education institutions. Higher Education Management Department director-general Prof Datuk Dr Hassan Said says the figure for the 2007/2008 academic year will increase as the Ministry is still considering appeals from disabled students. Table 1 shows the statistic of disable people students at public HEI before academic year of 2007/08.

Table 1.1: The breakdown for last year is:

University	No. of break down
Universiti Malaya	29
Universiti Sains Malaysia	20
Universiti Kebangsaan Malaysia	28
Universiti Teknologi Mara	29
Universiti Utara Malaysia	14
Universiti Pendidikan Sultan Idris	14
Universiti Teknologi Malaysia	11
Universiti Putra Malaysia	10
International Islamic University Malaysia	10
Universiti Malaysia Terengganu	6
Universiti Darul Iman	5
Universiti Malaysia Sabah	3
Universiti Sains Islam Malaysia	2
Universiti Teknikal Malaysia Melaka	1
Universiti Malaysia Pahang	1

About 50% of disable students are expected using wheelchair as their medium of movements. The statistic only recovered for students already have registered as disable students. There are some emergency cases students are coincidently faces trouble and loss mental or physical part permanently or some distances of time. Therefore, the statistic of disable students in higher education institutions will be more than the statistic in the table 1.1 and the number of disable students using wheelchair also higher than stated percentages.

An elevator can be considered as a transport device used to move goods or people vertically in a building. In British English and other Commonwealth English's, elevators are known more commonly as lifts. Lift began as simple rope or chain hoists. A lift is essentially a platform that is pulled up and down by a mechanical means. A modern day lift consists of a cab (also called a "cage" or "car") mounted on a platform within an enclosed space called a shaft, or in Commonwealth countries called a "hoistway". In the past, lift drive mechanisms were powered by steam and water hydraulic pistons. In a "traction" lift, cars are pulled up by means of rolling steel ropes over a deeply grooved pulley, commonly called a sheave in the industry. The weight of the car is balanced with a counterweight.

1.2 PROBLEM STATEMENT

Usually, large building which consist more than five levels in Malaysia has lift system to facilitate the moving of these people. However, the facility is not provided in building with less than five levels. Thus, this project is aiming to design and analyze a light weight of lift system for the use of disable people to move between the ground floor and the first floor of the building.

1.3 OBJECTIVE

The objective of this project to design and analysis a light weight lift system for disable people.